

Title (en)

Method and system for handling transmission errors.

Title (de)

Verfahren und System zum Bearbeiten von Übertragungsfehlern.

Title (fr)

Méthode et système pour traiter les erreurs de transmission.

Publication

EP 0229353 A2 19870722 (EN)

Application

EP 86117619 A 19861218

Priority

US 81769986 A 19860110

Abstract (en)

Automatic detection of and recovery from errors of transmissions in the form of a sequence of data packets is described as well as an improved combination of end-of-text (ETX) bytes along with checksums in each data packet to detect errors. The ETX character (12) is dynamically selected for each packet after the data comprising the packet has been assembled. This character is coded differently from the remaining character codes in its respective packet and is made the second byte thereof following the start-of-text byte (STX). The third byte (3) in each packet is made the complement of the preceding ETX byte, the latter of which is also made the last byte in the packet. Other bytes in each packet include: one byte (4) indicating the location of the packet in a set in a given transmission sequence; a byte (7) distinguishing the packet's set from other transmission sequences; two bytes (5,6) indicative of the number of data bytes in the packet; one byte (8) operating as a control character indicating the functional nature of the packet; data bytes; and two checksum bytes (9,10+m) which precede the last ETX byte. Upon detection of an error in a packet, the transmitter is immediately notified and retransmission is carried out only from the erroneous packet rather than from the beginning of the entire sequence as in the prior art.

IPC 1-7

G06F 11/10; **H03M 13/00**

IPC 8 full level

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CPC (source: EP US)

H04L 1/0083 (2013.01 - EP US)

Cited by

US5721743A; EP0492812A3; US5245616A; GB2250897A; EP0520580A1; BE1004959A3; US5570357A; EP0464014A3; GB2229896A; GB2229896B; EP0353757A3; US6084730A

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